

GDAC Exchange Token(GT) White Paper

GT White Paper: The Origin
(Full version)

Issue date
2018.12.05

Publisher
GDAC



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1. Visions of GDAC Exchange

“Financial innovation through blockchain”

Blockchain is technology based on open sources that surpasses the limitations of physical boundaries, with potential to innovate finance in timely and flexible ways. GDAC aims to create an innovatively efficient and transparent solution for the clients in the financial sector using the blockchain technology. This can be realized by resolving some of the chronic inefficiencies of the traditional financial industry, thus providing alternative financial options and increasing the benefits for the members of this society.

However, we fully recognize that the blockchain technology is not the ultimate solution to all problems and inefficiencies. GDAC believes that the core value of blockchain, regarding the enhancement of industry, is creating fully functioning services and enhancing user experiences through incorporation of the blockchain technology with the pre-existing technologies.

Actwo Technologies, the company behind GDAC, continues to hire experts from the traditional finance, media, and blockchain industry in order to achieve such values. Actwo also operates a blockchain hub, that assists companies to incorporate blockchain technology into their operations, as a member of global cooperative blockchain body Peer (www.peer.com), while partnering with numerous blockchain projects. As we acquire fundamental technology and accumulate experiences, we look forward to presenting the blockchain technology in the form of operational services to the users.

As the new paradigm in finance develops, GDAC users will become the participants and contributors that form this ecosystem, who reap the financial benefits and opportunities.

2. GT(GDAC Token)

2.A. Limitations of existing exchange tokens

As competition between crypto exchanges intensify, several exchanges generated ‘exchange-tokens’ that contain dividend rights. However, in our recent publication of “The structural limitation of third generation exchange token”, we discussed the long-term limitations of the exchange dividend tokens that reward market makers who create liquidity in the exchange. The constant increase of circulated token volume in the market will eventually lead to decrease in marginal dividend payout ratio, decrease in participation, and decrease in token value.¹

Another issue with exchange tokens with dividend rights is that circulation mechanism of ‘**contribution**’ → ‘**measurement**’ → ‘**reward**’ → ‘**spending**’ → ‘**recovery**’ is unsustainable. There are 2 fundamental reasons.

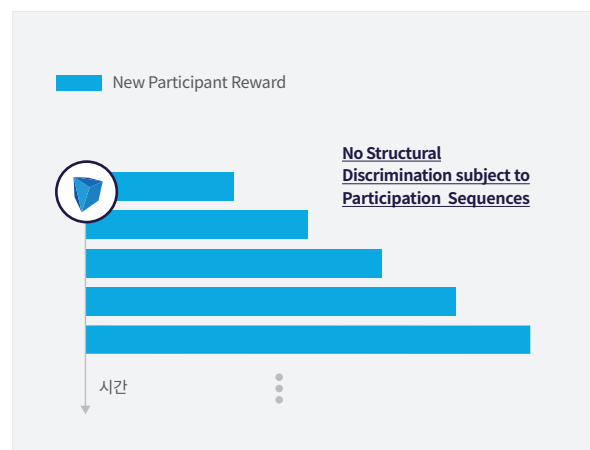


Image 1. Typical Circulation Mechanism

“Contribution needs to be closely interlocked with reward to sustain the virtuous cycle of tokens”

The first problem is the dividend payout term. Most crypto-currencies are designed to enforce network participation through contribution to the network

¹ Trade mining structure where fixed quantity of tokens are issued daily

and reward systems as shown on [Image 1]. The key to creating such reliable network is to design a structural mechanism that does not discriminate yields according to point of entry.

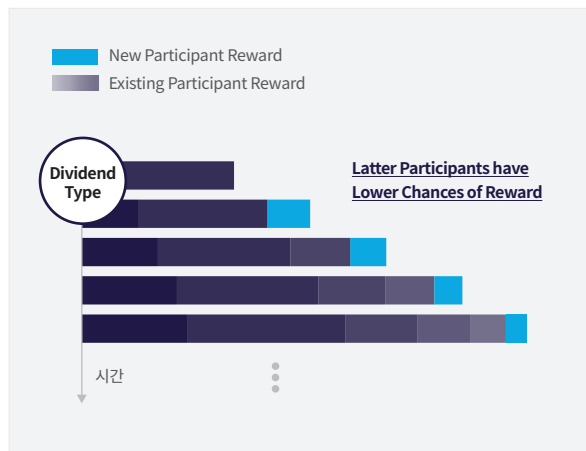


Image 2. Nonrecurring token mechanism that pays dividends for the circulated volume

However, most 3rd generation exchange tokens contain dividend² rights which prevent the network from establishing a virtuous cycle of contribution and reward. It is because while the dividend rights from trade mining includes rewards in the future point in time, the amount of rights acquirable through the exchange tokens are proportionately limited to the profits of the exchange.³ Unfortunately, this problem cannot be resolved by simply increasing the source of revenue for dividend payouts.⁴

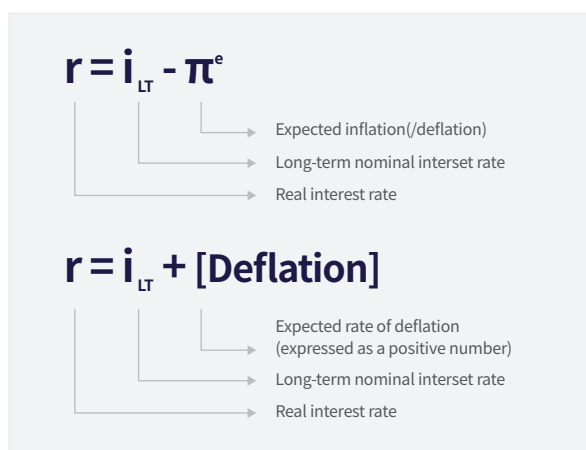


Image 3. I. Fisher Equation⁵

“Rights assigned to tokens make the utility feature irrelevant”

The second problem arising from token dividend rights is the potential risk of deflation. As represented in [Image 3] above, deflation is a vicious cycle where increase in real interest rate decrease spending that decreases production, and debt increases that leads to disposal of assets resulting in decrease in general level of prices that decreases spending even more. The problems of aforementioned exchange tokens containing dividend rights is similar in that 100 tokens today are not identical in the value of 100 tokens tomorrow, that creates decrease in utility value, similar to the decrease in spending of deflation.⁶

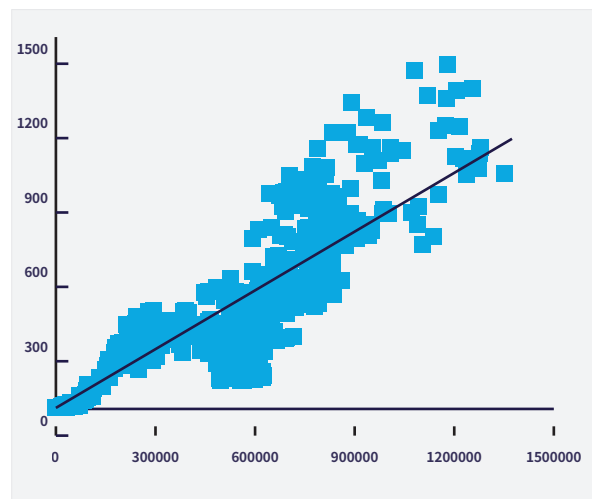


Image 4. Prime example where utility creates value: Ethereum transaction throughput (X-axis) and price (Y-axis)

Exchange tokens are generally designed to provide multiple advantages besides economic incentives, including voting rights on coin listings, governance rights, premium membership advantages, trading fee discounts and more. The exchanges provide utility value to boost demand and prices. As illustrated in [Image 4], increased utility value (increase in token demand) typically increases prices of the crypto-currency.

Nevertheless, deflation effect caused by dividend rights prevent exchange tokens from expanding its utility value.

² Generally, only distributed tokens have dividend rights

³ The portion of transaction fee that is distributed to the token holders

⁴ Note: "The structural limitation of third generation exchange token" GDAC Research. Devin.kim

⁵ The notion behind the 'Fisher Equation', that inflation and deflation each have a negative and positive effect on the real interest rate

⁶ This deflation effect is also found in a small number of consensus algorithms that grant rights to tokens

2.B. GT's Structure

“GT generates economic value through utilization”

GDAC recognizes the nature of exchange services where it faces the need to provide economic incentives to the users in order to vitalize transactions⁷, while exchange tokens suffer short lifespan and limitations in circulation mechanisms.

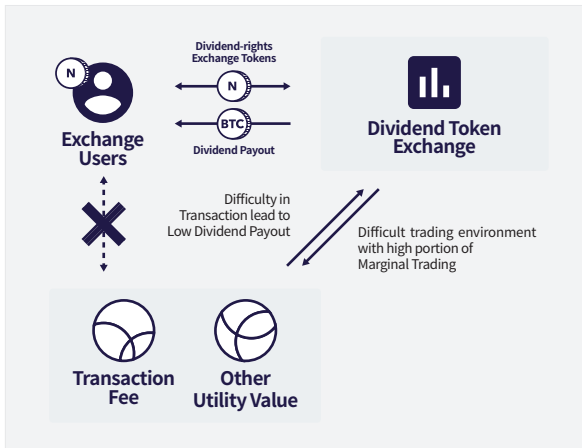


Image 5. Exchange tokens with limited utility value due to dividend rights

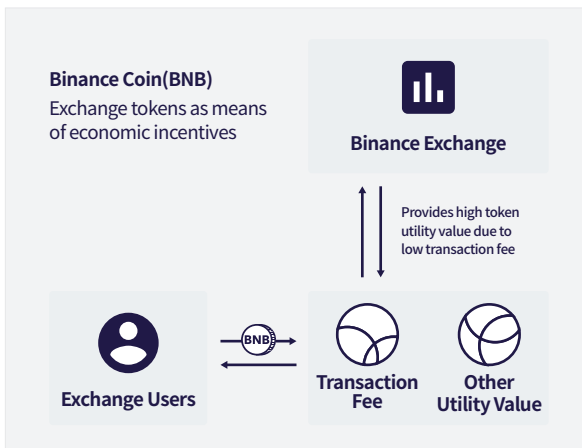


Image 6. Binance Coin (BNB) structure with discounts on transaction fees

[Image 5] illustrates the limited utility value of an exchange token due to its dividend right feature. GDAC incorporated parts of Binance Coin in [Image 6] and the Bitcoin network [Image 7] into its structure in order to solve this problem. We anticipate 2 major contrasts through GT (GDAC Token) structure.

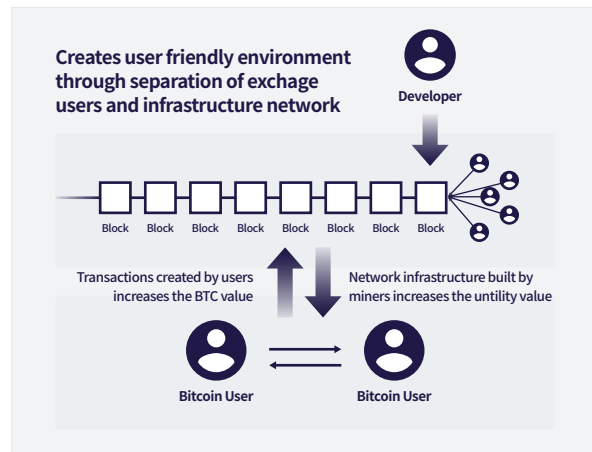


Image 7. Bitcoin network

First, GT generates economic value through utilization instead of rights where it doesn't offer rights to periodic economic incentives. What GT offers are high level economic incentives and opportunities to participate in distinguished services through use (utilization) of the tokens.

The first utilization of GT will come from use for crypto-currency based products⁸ and participation in GL (GDAC League).⁹ Use for crypto-currency based product refers to GT being the means of exchange for transactions, and GL participation includes forming teams, participating in teams and increased contribution efficiency during the GL events. The utility aspect of GT will continue to expand. Please check part 4. Token Issuance for detailed issuance and utility plans of GT.

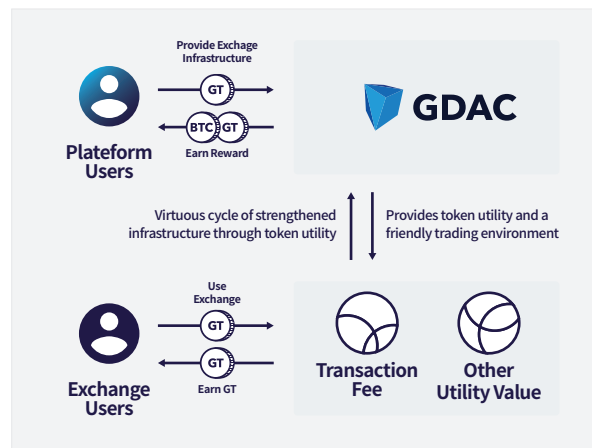


Image 8. Distinct economic incentive structure of GT for typical users and infrastructural users

⁷ Portion of transaction fees allocated as economic incentives

⁸ 4. Note: 4.B.1. Crypto Currency Based Products

⁹ 4. Note: 4.B.2. GDAC League

Second contrast of GT from an ordinary exchange token is the separation of economic incentive structure between its ordinary exchange aspect and the infrastructural aspect. Exchange tokens with rights to economic incentives are difficult to spend by its nature because users are forced to give up their future economic rights. GT enhances the utility of GT by distinguishing users who pursue economic gains by using GT as medium of exchange (the infrastructural users) with ordinary users who utilize GT for everyday transactions and services on GDAC.

The infrastructural users are the GL participants who will reap economic incentives proportionate to their contributions and team rankings. The ordinary users of GDAC exchange who wish not to participate in GL will enjoy a pleasant transaction environment created by the infrastructural users, who increase transaction volume. The enhanced transaction environment created by GL participants include arbitrage trading opportunities, liquidity, and additional services through GT. Such enhanced trading environment will increase utility for GT, thus creating a more adequate trading environment for all GT users in a virtuous cycle, through which we anticipate increased economic incentives for GL participants and increase in value of GT.

3. Introduction to GT

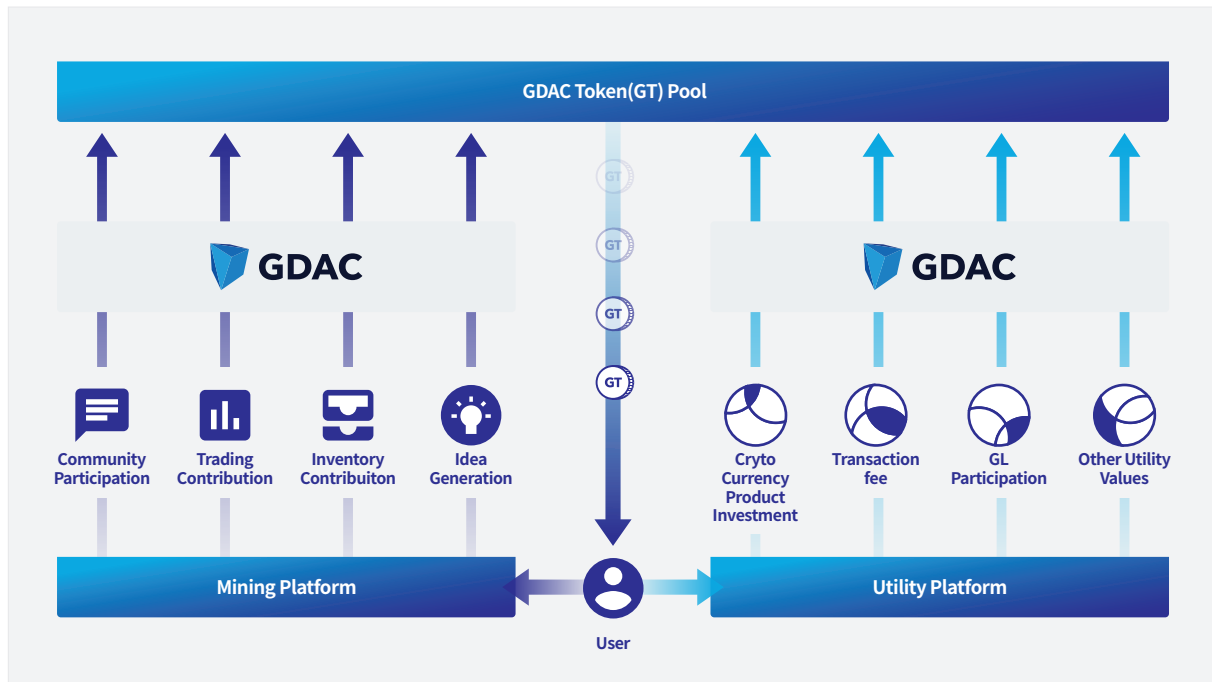


Image 9. Overview of GT’s virtuous cycle

GT operates in a cycle between the mining platform and utility platform through which it connects the community based finance with crypto currency market as the middle asset.

3.A. Mining Platform

There are various ways users can contribute to the GDAC ecosystem.

One of the fundamental ways for users to contribute is through the value-add mining & reward structure that includes trade mining that vitalizes transactions, holding asset mining, community mining, and suggesting ideas that could improve GT based services. More ways of user contribution to the ecosystem will be introduced in the near future, and we will continue to reflect the needs and opinions of the community.

3.B. Utility Platform

Most exchange tokens that promise different future

rights find it difficult to practice the token call back mechanism through spending.

In response, GDAC introduces GT as means of exchange rather than future rights and a utility platform where GT can be used to create differentiated utility value to the users. GT’s ‘token recovery mechanism’ (retrieving issued token back into the system) based on its various utility features are expected to strengthen the sustainability of GT mining. Please check part 4. Token Issuance – 4.B. Utility for detailed information.

3.C. Community Based Exchange System

GDAC is a community-based exchange system that develops along with the users. The goal is to continuously reflect the ideas and needs of the community and develop them into tangible product and services in a bottom-up approach. Anybody can present ideas to GDAC on improving its services and utility to receive reward.

3.D. Roadmap

GDAC plans to vigorously communicate with its community in order to execute according to the following roadmap.

(1) GDAC will continue to provide its users GT as a reward mechanism to encourage community involvement in its development. GDAC has already partnered with several established communities to ensure constant user involvement and communication and will continue to develop more communication channels. This will allow users to get involved in communities more actively and enhance the exchange system's development and utility of its users.

(2) GDAC will introduce its first crypto-currency based product followed by numerous differentiated products that will be exclusive on the GDAC platform. GT will play an active role of medium of exchange when users experience these products. Based on the nature of this market with high volatility and variety in coins, GDAC presents crypto-currency products with high variety and flexibility.

(3) Blockchain is a technology that allows anyone to realize and create their own technology, product and services. GDAC aims to create an open platform with high interaction with the community and encourages users to create communities and actively communicate with each other. This will allow users to generate and experience more consumer-based services.

4. Token Issuance

4.A. Token Issue Planning

The total number of GT will be 100 billion tokens, designed to issue gradually over long term. 1% of total issuance (1 billion GTs) will be issued to form

the market in its initial stage, distributed over time up to the point when the first investment product is launched. During this period, the efficiency of measuring contributions and mining methods will continue to evolve to improvement.

Issued tokens will be distributed according to user contributions. The issue and distribution plans are subject to change flexibly according to the situation. Please check part 5. Token Issue Structure for detailed information.

4.A.1. Trade Mining

Trade mining takes up majority of the daily distribution of newly issued GT and users are able to receive it according to their contribution to GDAC, the trading volume they create. The issued amount may vary according to listing dates on the exchange and inventory conditions of the crypto-currency pairs. The contribution measurement will constantly be updated in response to the community feedback and opinions for optimization.

4.A.2. Holding Asset Mining

Holding asset mining refers to the rewards earned from user contributions of depositing fiat and crypto-currencies into the GDAC system. Increased inventory for an exchange allows higher liquidity that leads to higher transaction accessibility for traders and positively impacts and increases user experience with the crypto-currency based products on the system.

4.A.3. Community Mining

GDAC plans to reward community vitalization in various ways. Please check the details of community mining methods and upcoming events at the announcement page of GDAC exchange.

4.A.4. Value-Add Mining

GDAC aims to be the exchange that community desires through the community's involvement. Value-add mining refers to the reward provided to all user activities that contribute to enhancement of the exchange. Activities considered as value-adding includes ideas to improve GDAC services, ways to increase utility of GT for the users, and expansion of GT utility as a partner for GDAC, etc.

4.B. Utility

4.B.1. Crypto Currency Based Products

GT is used as means of exchange when using crypto-currency based products on GDAC. GDAC has plans to provide various types of products that increase the utility value of GT for the exchange users and GT holders, where the scope of products encompasses hedging products and other transactional products that allow you to strategically react to the volatility of the market.

4.B.2. GDAC League

GTs in GL are used to form and expand teams and for items that increase the effectiveness of contributions to get ahead in team competitions. The required amount of GT at GL may vary according to the number of teams and the GT circulation volume in the market. Detailed information regarding the formula calculating the required GT and reward amount can be accessed through the GL paper that will be published in the near future.

4.B.3. Airdrop

GDAC provides irregular airdrops to all GT holders. The types of crypto-currency, distributed amount, and ratio are subject to change. Detailed information regarding the airdrop can be accessed through GDAC announcements and posting at the time of airdrop.

4.B.4. Governance Rights

New crypto listing selections will be processed internally in the initial stages of GDAC until sufficient amount of GT have been distributed into the market, when the crypto listing selection process will change.

4.B.5. Increased Opportunities for Early Entrants

Actwo Technologies, the company behind GDAC, operates numerous businesses and projects including consulting and accelerating, operating a global blockchain hub upground, and hosting globally largest blockchain conference Deconomy. GDAC users who contribute to building the blockchain financial infrastructure and join the ecosystem by holding GT, will be provided with variety of opportunities arising from the numerous businesses of Actwo Technology including airdrops, seniority to participate in upcoming ICO/IEOs, and additional distribution of crypto-currency. Please check the announcements for more information.

5. Token Issue Structure

5.A. Issuance

Total issued: Max 100 billion

- 1) The outlined total issue amount may change according to future stabilization of token utility conditions.
- 2) GT is designed for long-term operation. Respectively, monthly distribution of GT to the market will be a very small proportion of the total issue amount.
- 3) The monthly distribution ratio may also change according to the market condition.
- 4) GT issuance agenda will be designed and updated in regard to the trading environment, GT utility conditions, and fluctuation in GT value.

5.B. Distribution Structure

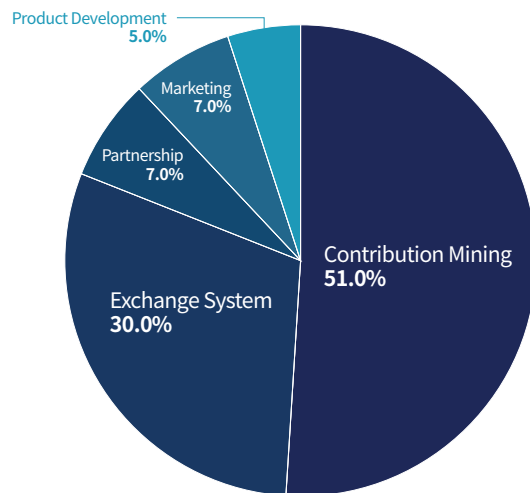


Image 10. Token distribution Structure

100 million GDAC assigned GT will be released from lock-up each month. These tokens can act as the foundation to create a more transaction-friendly environment for GT and also provide liquidity. The additional amount apart from the fixed amount assigned for partnerships can also be used to reward contributors of the ecosystem

Approximately 400 to 500 million GT will be assigned to contribution mining. Contribution mining consists of trade mining, holding asset mining, community mining, value-add mining, and more ways of contribution mining will be developed. Approximately 300 million will be assigned to trade mining and holding asset mining, 100 million towards community mining, and 100 million towards value-add mining and other contributions. The undistributed amount for community mining and value-add mining will not be transferred to the following month. Details of the distribution are subject to change due to advancement of GT utility and diversification of mining methods.

One-sixtieth (1/60) of total GT allocated to Product R&D will be released each month. GDAC will use this to finance R&D to constantly introduce GT based products for the users.

GT assigned for partnerships will be used for external partnerships and collaboration with firms to expand utility value of GT. The lock-up period may differ according to the nature of the partnership.

GT assigned for marketing purposes will be used to expand the GDAC ecosystem and increase contributors and participants.

* All information on distributed GT will be periodically updated on GT website.

GDAC strives to create an open financial platform of universalized financial freedom. Our vision is to attain a sustainable reality of blockchain in a long term perspective. Through which the crypto-currency and blockchain industry will flourish and the economic and utility value of GT will increase. GT will play a pivotal role in this process and will create concrete value through experimentation.



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Publisher
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Issue date
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